

Water-Data Report 2013

**04212945 CONNEAUT CREEK NEAR CHERRY HILL, PA**

Eastern Lake Erie Basin  
Chautauqua-Conneaut Subbasin

LOCATION.--Lat 41°55'04", long 80°28'09" referenced to North American Datum of 1927, Erie County, PA, Hydrologic Unit 04120101, at bridge on Griffey Road, 1.2 mi northwest of Cherry Hill, and 1.9 mi south of West Springfield.

DRAINAGE AREA.--149 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--1989 to current year.

GAGE.--Non-recording gage. Datum of gage is 780 ft above National Geodetic Vertical Datum of 1929, from topographic map.

COOPERATION.--Station established and maintained by the U.S. Geological Survey in cooperation with the Pennsylvania Department of Environmental Protection.

**DISCHARGE MEASUREMENTS**  
**WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013**

<b>Date</b>	<b>Discharge, in ft<sup>3</sup>/s</b>
Oct 17, 2012	52.9
Dec 4, 2012	415
Feb 27, 2013	1,540
Feb 27, 2013	1,760
May 15, 2013	95.3
Jul 18, 2013	47.2
Aug 21, 2013	19.4
Aug 21, 2013	20.3

## 04212945 CONNEAUT CREEK NEAR CHERRY HILL, PA—Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 2002 to current year.

COOPERATION.--Water-quality samples were collected as part of the Pennsylvania Department of Environmental Protection Water-Quality Network (WQN) with cooperation from the Pennsylvania Department of Environmental Protection.

REMARKS.--Analyses for pH, water temperature, specific conductance, and dissolved oxygen were performed on site. All other sample analyses were performed at the Pennsylvania Department of Environmental Protection laboratory in Harrisburg, Pa. Occasionally, values for filtered parameters may exceed values for the corresponding unfiltered parameter. These results are within the limits of analytical precision and methods.

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013**

Part 1 of 4

[ANC, acid neutralizing capacity; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; P, phosphorus; ft<sup>3</sup>/s, cubic feet per second; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; --, no data; <, less than; E, estimated; M, presence verified but not quantified]

Date	Sample start time	Discharge, instantaneous, ft <sup>3</sup> /s (00061)	Dissolved oxygen, water, unfiltered, mg/L (00300)	pH, water, unfiltered, field, standard units (00400)	pH, water, unfiltered, laboratory, standard units (00403)	Specific conductance, water, unfiltered, laboratory, µS/cm at 25°C (90095)	Specific conductance, water, unfiltered, µS/cm at 25°C (00095)	Temperature, water, °C (00010)	Dissolved solids dried at 180°C, water, filtered, mg/L (70300)	Hardness, water, mg/L as CaCO <sub>3</sub> (00900)
11-01-2012	1030	E 2,700	8.8	7.3	7.4	112	110	8.3	100	46
01-10-2013	1000	364	13.6	7.6	7.8	220	223	.7	106	78
03-07-2013	0800	255	13.5	7.1	7.8	205	207	1.6	138	77
05-08-2013	0845	53	10.2	7.8	8.0	238	234	17.5	140	97
07-24-2013	1300	1,570	7.3	7.4	7.8	144	147	20.9	124	68
09-17-2013	0745	18	8.1	8.0	8.2	318	320	13.0	196	140

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013**

Part 2 of 4

[ANC, acid neutralizing capacity; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; P, phosphorus; ft<sup>3</sup>/s, cubic feet per second; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; --, no data; <, less than; E, estimated; M, presence verified but not quantified]

Date	Sample start time	Suspended solids, water, unfiltered, mg/L (00530)	Calcium, water, unfiltered, recoverable, mg/L (00916)	Magnesium, water, unfiltered, recoverable, mg/L (00927)	ANC, water, unfiltered, fixed endpoint (pH 4.5) titration, laboratory, mg/L as CaCO <sub>3</sub> (00417)	Bromide, water, filtered, mg/L (71870)	Chloride, water, filtered, mg/L (00940)	Sulfate, water, filtered, mg/L (00945)	Ammonia, water, unfiltered, mg/L as N (00610)	Nitrate, water, unfiltered, mg/L as N (00620)
11-01-2012	1030	34	13.0	3.3	31	--	4.7	13.2	0.040	0.56
01-10-2013	1000	14	22.7	5.1	57	--	20.7	15.7	.060	.63
03-07-2013	0800	16	22.6	5.0	61	--	14.5	16.8	.050	.62
05-08-2013	0845	< 5	28.5	6.2	84	--	13.5	16.4	< .020	.20
07-24-2013	1300	254	18.0	5.6	53	M	6.5	7.1	.050	.53
09-17-2013	0745	< 5	39.5	8.7	117	.1	12.7	20.9	< .020	1.04

## 04212945 CONNEAUT CREEK NEAR CHERRY HILL, PA—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013**

Part 3 of 4

[ANC, acid neutralizing capacity; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; P, phosphorus; ft<sup>3</sup>/s, cubic feet per second; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; --, no data; <, less than; E, estimated; M, presence verified but not quantified]

Date	Sample start time	Nitrite, water, unfiltered, mg/L as N (00615)	Orthophosphate, water, unfiltered, mg/L as P (70507)	Phosphorus, water, unfiltered, mg/L as P (00665)	Total nitrogen, water, unfiltered, mg/L (00600)	Aluminum, water, unfiltered, recoverable, µg/L (01105)	Copper, water, unfiltered, recoverable, µg/L (01042)	Iron, water, unfiltered, recoverable, µg/L (01045)	Lead, water, unfiltered, recoverable, µg/L (01051)	Manganese, water, unfiltered, recoverable, µg/L (01055)
11-01-2012	1030	< .040	0.03	0.081	1.1	1,100	< 4	1,920	M	60
01-10-2013	1000	< .040	.02	.037	.94	300	< 4	760	< 1.0	50
03-07-2013	0800	< .040	.02	.027	.82	< 200	M	560	< 1.0	40
05-08-2013	0845	< .040	< .01	.029	.54	< 200	< 4	550	< 1.0	50
07-24-2013	1300	< .040	.04	.254	1.5	5,300	10	10,300	M	270
09-17-2013	0745	< .040	.02	.029	1.3	< 200	< 4	310	< 1.0	30

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013**

Part 4 of 4

[ANC, acid neutralizing capacity; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; P, phosphorus; ft<sup>3</sup>/s, cubic feet per second; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; --, no data; <, less than; E, estimated; M, presence verified but not quantified]

Date	Sample start time	Nickel, water, unfiltered, recoverable, µg/L (01067)	Zinc, water, unfiltered, recoverable, µg/L (01092)
11-01-2012	1030	< 50	10
01-10-2013	1000	< 50	10
03-07-2013	0800	< 50	< 10
05-08-2013	0845	< 50	< 10
07-24-2013	1300	< 50	40
09-17-2013	0745	< 50	< 10